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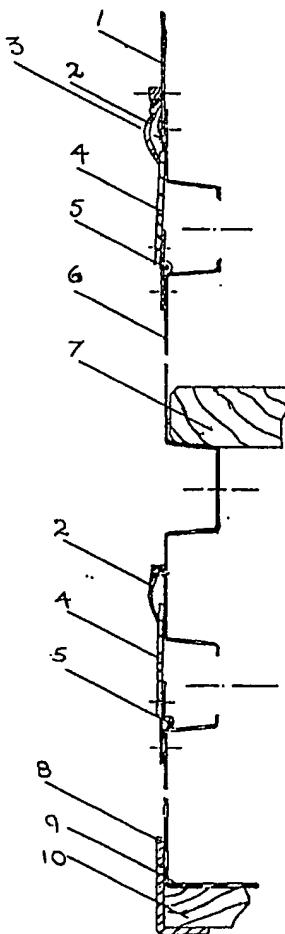
(56) Documents cited
GB A 2071022 GB 0943618
GB 1473637 GB 0661115
GB 1400018 GB 0630573
GB 1348932

(58) Field of search
B7B
B7L

(54) Vehicle body or container construction

(57) A box trailer, vehicle body or container has body side front or rear panels manufactured from sheet materials incorporating large internally facing swages positioned horizontally. The panels are supported on the exterior by means of vertical members. Intermediate internal flooring 7 can be positioned using the top horizontal surfaces of the body panel swages. Ventilation to the interior can be obtained from holes 4 pierced through the base of each panel swage and be controlled by flaps 5 or slides fitted to the exterior or interior of the panels.

FIGURE 3



The drawings originally filed were informal and the print here reproduced is taken from a later filed formal copy.
The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1982.
This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 1982.

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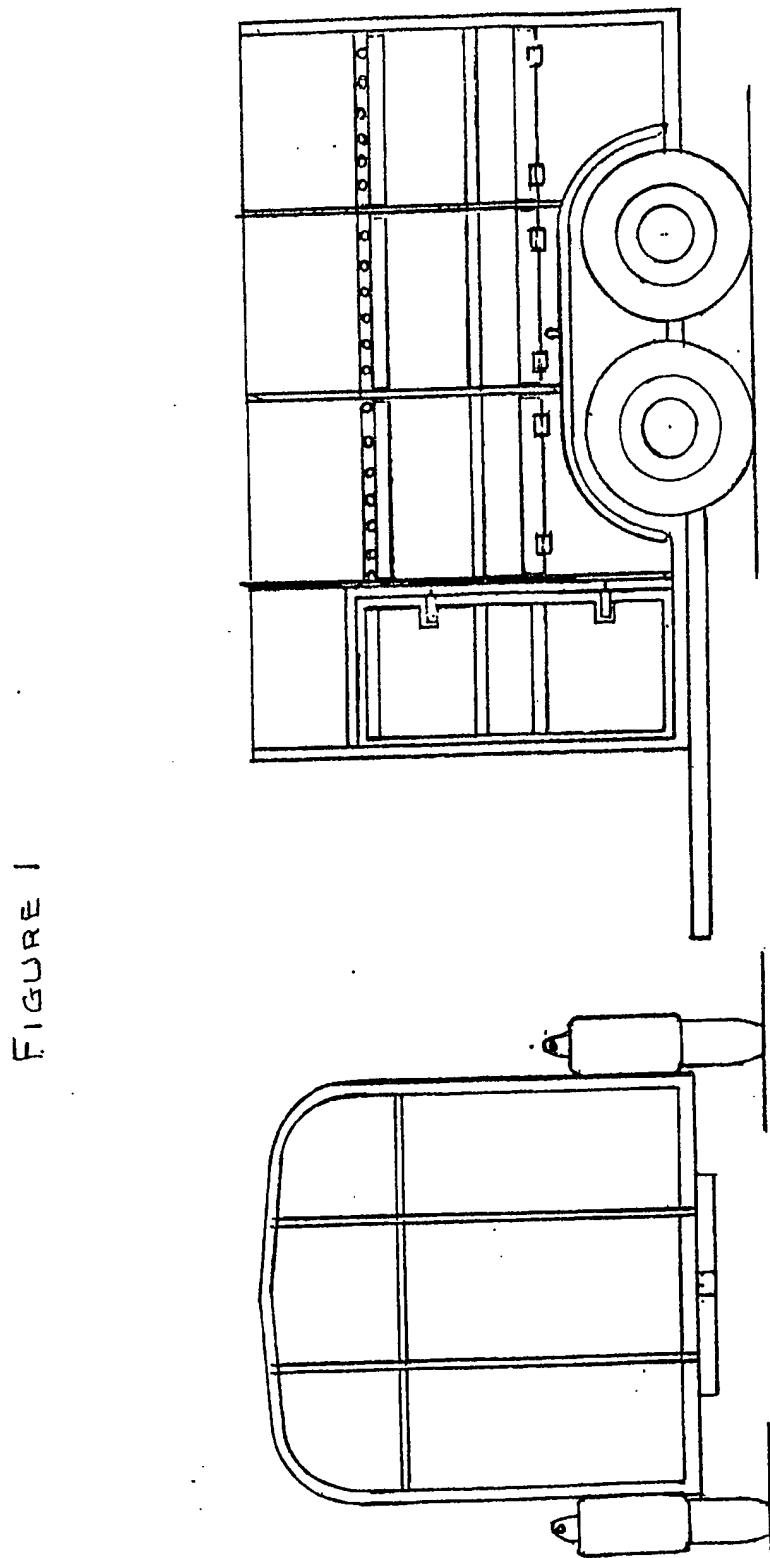
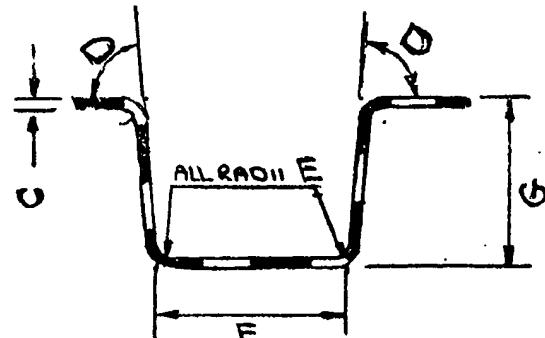
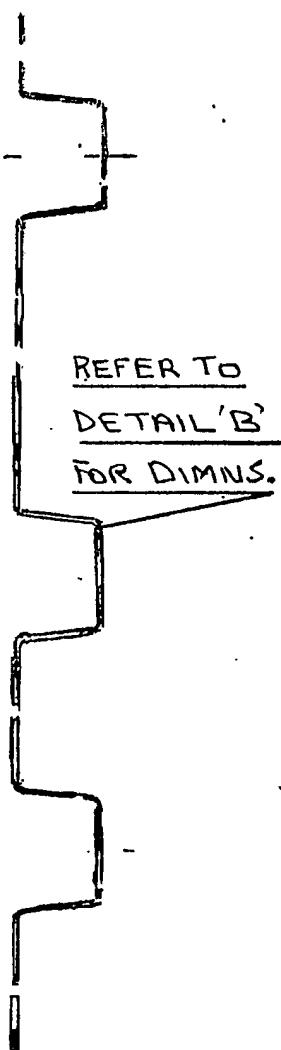


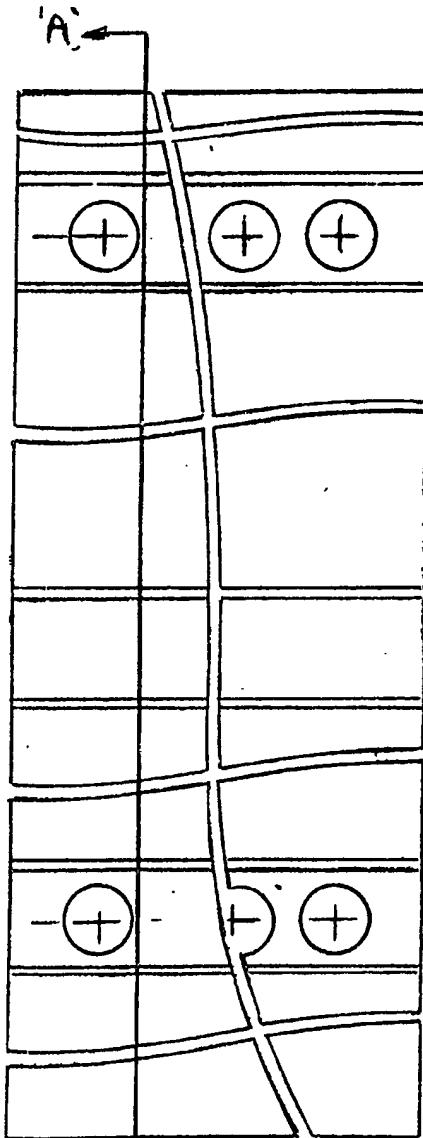
FIGURE 2



DETAIL 'B'

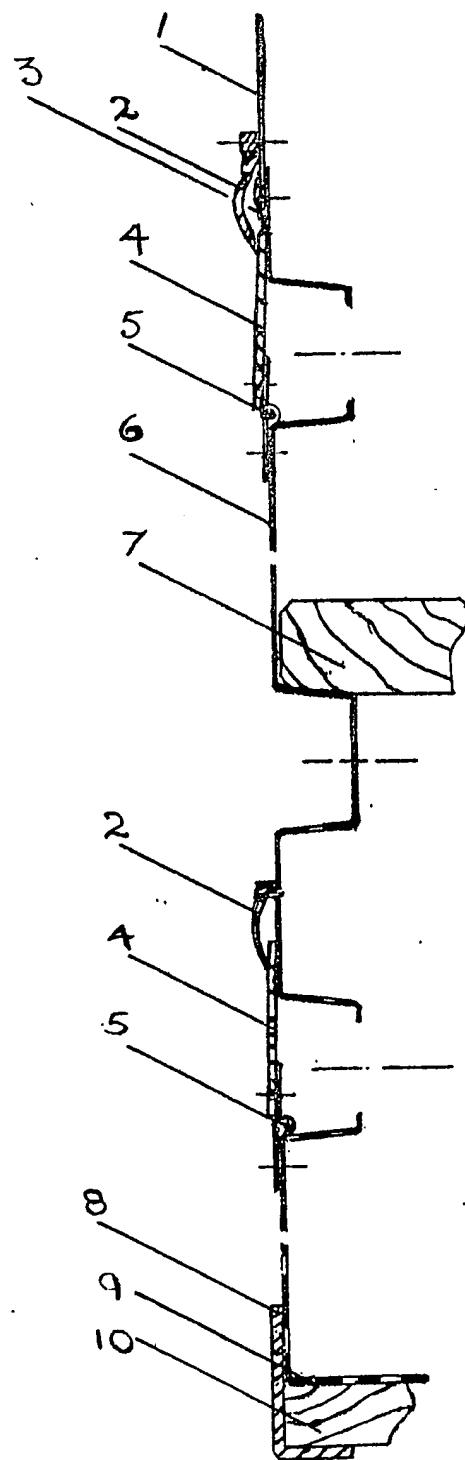


SECTION 'A'- 'A'



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FIGURE 3



SPECIFICATION

Trailer body construction

5 The design in this application indicates a method of construction which can be used for trailers, vehicle bodies and containers. 5

The main feature of the design is the method used for the manufacture of the side, front and rear panels. In some applications they could be incorporated into the roof components.

10 These panels are manufactured from sheet material with large rectangular swages formed in them. When used for front, rear or side panels for a trailer the swages are positioned horizontally and are formed to face inwards during assembly. The number of swages incorporated in each panel and the distances between them are determined by the overall panel size and the use for which the structure is designed. 10

They are supported by externally sited vertical members which may be fixed to the external surface of each panel.

15 The swages provide sufficient rigidity in each sheet such that additional horizontal members are not required to be located to the panel sides during assembly. 15

They are also deep enough and strong enough to support any intermediate flooring, thus eliminating the need for additional internal horizontal bearers which are normally located to the internal surfaces at each side of the structure.

20 Pierced holes of any shape may be incorporated in the base of the swages to provide ventilation to the interior. When used for side panels and pierced holes are included, flaps may be positioned on the outer or inner surfaces of the swages to control ventilation to the interior. They may be located by hinges or allowed to slide. 20

Materials used for the manufacture of the panels may be steel, light alloy or composite materials.

25 Should manufacturing in one piece be difficult to achieve, then the panels may be made in smaller sections and joined along either or both axes. 25

Figure 1 illustrates a cattle trailer incorporating one piece side panels and an access door on one side, constructed using this method.

30 *Figure 2* gives details of the panel, material, ventilation holes and intermediate deck bearer swage used for this range of trailers. 30

Figure 3 shows a cross section through a side panel assembly used for these trailers. The methods used for locating the roof panel, the ventilation flap assembly and the intermediate floor are illustrated.

35 *Key to dimensions* 35

	REFERENCE LETTER	DIMENSIONS	
40	C	2 mm	40
	D	85°	
	E	1/8 INCH	
	F	2 INCH (INSIDE)	
	G	1 1/8 INCH	

Key to reference numerals

	ITEM NO.	DESCRIPTION	
5	1	ROOF PANEL (22 SWG. GALV.)	5
	2	FLAP CATCH	
10	3	MOULDING (1" ALUM)	10
	4	FLAP (12 SWG ALUM)	
	5	BUTT HINGE	
15	6	SIDE PANEL (2mm ALUM.)	15
	7	INTER FLOOR (SOFTWOOD)	
20	8	CHASSIS SIDE MEMBER	20
	9	CHECK PLATE (3 mm ALUM.)	
	10	1ST FLOOR (SOFTWOOD)	
25			25

CLAIMS

1. A box trailer, vehicle body or container constructed with body side, front or rear panels manufactured from sheet materials incorporating large internally facing swages positioned horizontally in the sheeting. 30
2. A box trailer, vehicle body or container as claimed in Claim 1 wherein the number of swages incorporated in each panel may be varied.
3. A box trailer, vehicle body or container as claimed in Claim 1 or Claim 2 wherein the dimensional sizes of the swages may be varied.
- 35 4. A box trailer, vehicle body or container as claimed in any preceding claim wherein the dimensions between the swages may be varied.
5. A box trailer, vehicle body or container as claimed in any previous claim wherein each panel is manufactured from one single sheet of material.
6. A box trailer, vehicle body or container as claimed in any previous claim wherein the panels are 40 manufactured in small sections and joined along any axis.
7. A box trailer, vehicle body or container as claimed in any preceding claim wherein the materials used for the manufacture of the panels may be steel, light alloy or composite materials.
8. A box trailer, vehicle body or container as claimed in any preceding claim wherein the panels are supported by externally sited vertical members attached to the external surface of each panel.
- 45 9. A box trailer, vehicle body or container as claimed in any preceding claim wherein intermediate flooring may be supported by the top surfaces of each panel swage.
10. A box trailer, vehicle body or container as claimed in Claims 1 - 8 wherein pierced holes of any shape may be incorporated into the base of each or any swage to provide ventilation to the interior.
11. A box trailer, vehicle body or container as claimed in Claim 10 wherein flaps may be positioned on 50 the exterior surface of each panel or panels to cover the swages and control ventilation.
12. A box trailer, vehicle body or container as claimed in Claim 10 wherein flaps may be positioned on the interior surface of the panel or panels to cover the swages and control ventilation.
13. A box trailer, vehicle body or container as claimed in Claim 11 or Claim 12 wherein the ventilation flaps may be hinged to control ventilation.
- 55 14. A box trailer, vehicle body or container as claimed in Claim 11 or Claim 12 wherein the ventilation flaps may slide to control ventilation.
15. A box trailer for the conveyance of livestock substantially as described herein with reference to Figures 1 - 3 of the accompanying drawings.